

Atty Dkt. No.: YAMA-001CON9
USSN: 09/942,032

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CLAIMS

Claims 1-39 (Cancelled)

40. (Currently Amended) A method of treating soil to promote the growth of plants therein, said method comprising mixing with the soil a composition comprising an assimilable carbon skeleton energy component in an amount sufficient to stimulate the growth of plants, a macronutrient component, a micronutrient component, a vitamin/cofactor component and a complexing agent.

41. (Previously Presented) The method of Claim 40 wherein said composition also contains microorganisms which have a beneficial effect upon the soil or which act as antagonists to at least one of pathogens and pests in the soil.

Claims 42- 51 (Cancelled)

52. (Previously Presented) The method according to Claim 40 wherein the complexing agent is at least one of: citric acid, lignosulfonates, fulvic acid, ulmic acid, humic acid, polyhydroxy organic acid, EDTA, EDDA, EDDHA, HEDTA, CDTA, DTPA or NTA.

53. (Previously Presented) The method according to Claim 40 wherein the carbon skeleton energy component is at least one of a: sugar, sugar alcohol, organic acid and nucleotide.

54. (Previously Presented) The method according to Claim 53 wherein the carbon skeleton energy is at least one of: mannose, lactose, dextrose, erythrose, fructose, fucose, galactose, glucose, gulonic, maltose, raffinose, ribose, ribulose, rutinose, saccharose, stachyose, trehalose, xylose, xylulose, adonose, amylose, arabinose, fructose phosphate, fucose-p, galactose-p, glucose-p, lactose-p, maltose-p, mannose-p, ribose-p, ribulose-p, xylose-p, xylulose-p, deoxyribose, adonitol, galactitol, glucitol, maltitol, mannitol, mannitol-p, ribitol, sorbitol, sorbitol-p, xylitol and mixtures thereof.

55. (Previously Presented) The method according to Claim 54 wherein the carbon skeleton energy component is molasses.

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56. (Previously Presented) The method according to Claim 40 wherein the macronutrient component is at least one of: nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, and derivatives thereof.
57. (Previously Presented) The method according to Claim 56 wherein the macronutrient component is nitrogen and the nitrogen is present as trivalent nitrogen and pentavalent nitrogen.
58. (Previously Presented) The method according to Claim 57 wherein the trivalent nitrogen is ammonia or urea and the pentavalent is nitrate.
59. (Previously Presented) The method according to Claim 56 wherein the amount of trivalent nitrogen ranges from 10 moles to 90 moles.
60. (Previously Presented) The method according to Claim 56 wherein the amount of pentavalent nitrogen ranges from 10 moles to 90 moles.
61. (Previously Presented) The method of Claim 56 wherein the ratio of trivalent nitrogen to pentavalent nitrogen is about 50:50.
62. (Previously Presented) The method according to Claim 40 wherein the micronutrient component is at least one of: zinc, iron, manganese, copper, boron, molybdenum and derivatives thereof.
63. (Previously Presented) The method according to Claim 40 wherein the vitamin/cofactor component is at least one of: thiamine, riboflavin, nicotinic acid, pyridoxine, folic acid, biotin, pantothenic acid, inositol, para-aminobenzoic acid, and derivatives thereof.
64. (Previously Presented) The method according to Claim 41 wherein the micro-organisms are chosen from: *Pseudomonas fluorescens*, *Pseudomonas putida*, *Gloeocapsa roseum*, *Streptomyces griseus*, *Gliocladium roseum*, *Bacillus subtilis*, *Anabaena* sp., *Streptomyces aureofaciens*, *Bacillus megaterium*, *Bacillus cereus*, *Bacillus brevis*, *Bacillus thuringiensis*, *Gliocladium virens*, *Talaromyces flavus*, *Trichoderma viride*, *Trichoderma harzianum*, *Penicillium*, *citrium*, *Acremonium falciforme* and *Ulocladium tuberculatum*.
65. (Previously Presented) The method of Claim 64 wherein the composition includes two or more different types of micro-organisms.

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66. (Previously Presented) The method of Claim 40 wherein the method is a method of treating soil to promote the growth of at least one of cereal crops, legumes, forage crops, stem and leaf crops, root crops, fruit crops, seed vegetables, nut crops, beverage crops, oil crops, fat crops, wax crops, spice crops, perfume plants, flavoring plants, forest crops, fiber crops and ornamental crops.

67. (Previously Presented) The method of Claim 66 wherein the method is a method of promoting the growth of cereal crops and the cereal crops are at least one of: rice, wheat, corn, barley, oats, sorghum, rye and millet.

68. (Previously Presented) The method of Claim 66 wherein the method is a method of promoting the growth of legumes and the legumes are at least one of: soybean, peanut, bean, broad bean, pea, chickpea, black eyed pea, pigeon pea and guar.

Please enter the following new claims:

69. (New) A method of treating soil to promote the growth of plants therein, said method comprising mixing with the soil a composition comprising an assimilable carbon skeleton energy component, a macronutrient component, a micronutrient component, a vitamin/cofactor component and a complexing agent, wherein said complexing agent is at least one of: citric acid, lignosulfonates, fulvic acid, ulmic acid, humic acid, polyhydroxy organic acid, EDTA, EDDA, EDDHA, HEDTA, CDTA, DTPA and NTA.

70. (New) A method of treating soil to promote the growth of plants therein, said method comprising mixing with the soil a composition comprising an assimilable carbon skeleton energy component, trivalent nitrogen and pentavalent nitrogen, a micronutrient component, a vitamin/cofactor component and a complexing agent.

71. (New) The method according to Claim 70 wherein the trivalent nitrogen is ammonia or urea and the pentavalent is nitrate.

72. (New) The method according to Claim 70 wherein the amount of trivalent nitrogen ranges from 10 moles to 90 moles.

73. (New) The method according to Claim 70 wherein the amount of pentavalent nitrogen ranges from 10 moles to 90 moles.

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74. (New) The method of Claim 70 wherein the ratio of trivalent nitrogen to pentavalent nitrogen is about 50:50.